



**Maricopa County**  
Air Quality Department

Number: PP-2014-002

Title: **Trip Reduction Program  
Travel Reduction Program Regional Task Force  
Survey Response Rate Policy**

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Issue Date: June 24, 2014

Revision Date:

Review Date: June 24, 2014

Approved by:

A handwritten signature in black ink, appearing to read "Jerry Geering".

Jerry Geering, Chairman  
Travel Reduction Program Regional Task Force

## I. Purpose

The purpose of this policy is to establish a minimum survey response rate for organizations that administer the annual Trip Reduction Program (TRP) commute questionnaire.

## II. Policy

The Task Force directs staff to process and evaluate valid TRP questionnaires following the procedures and criteria identified in this policy. Obtaining complete and accurate responses from a sufficient number of employees is vital to generating useful results that organizations can use to develop their annual TRP plan. A minimum response rate also ensures an organization cannot selectively survey a handful of alternative mode users to obtain a single occupant vehicle rate that exempts it from having to initiate/continue ordinance measures.

## III. Definitions

- A. Alternative Mode User (AMU) – a commuter who uses any mode of transportation other than a single occupancy motor vehicle.
- B. Employee – an employee who works at or reports to a single work site during any twenty-four hour period for at least three days per week during at least six months of the year (as defined in A.R.S. 49-581).
- C. Confidence Level – the percentage of all possible samples that can be expected to include the true population parameters. The confidence interval can take any number of probabilities, with the most common being 95% or 99%. A 95% confidence level implies that 95% of the confidence intervals would include the true population parameter.

- D. Margin of Error – the maximum expected difference between the true population and a sample estimate of that parameter. An allowance for slight error or miscalculation or changing circumstances.
- E. Ordinance Measures – a highly-effective measures/incentives as outlined in Ordinance P-7, Section 7C.
- F. Organization – a major employer as defined in A.R.S. 49-581.
- G. Single Occupant Vehicle (SOV) – a drive alone commuter.
- H. Staff – Maricopa County TRP staff.
- I. Statistical Penalty – an arithmetical factor applied to the summary analysis SOV/MT rates for sites that do not meet the required response rate. All non-respondents for a site are recorded as an SOV commuter when calculating the analysis.
- J. Task Force – the Travel Reduction Regional Task Force, designated by the Maricopa County Board of Supervisors as the responsible agency to implement and enforce this ordinance, and established in the County by Title 49, Chapter 3, Article 8, Arizona Revised Statutes.
- K. Transportation Coordinator (TC) – a person designated by a major employer or school to serve as the lead person in developing and implementing a Trip Reduction Program.
- L. Valid questionnaire – a TRP survey form that was completed solely by the employee with all questions filled-in with valid answers.

#### **IV. Procedure**

- A. Processing and Calculating
  - 1. Organizations are asked to distribute the TRP questionnaire to every employee and instructed to have each commuter complete their own form. Once the Transportation Coordinator (TC) collects and returns the survey forms, staff will:
    - a. Extract any blank (unused) forms.
    - b. Count the completed forms to assess the initial response rate.
    - c. Adjust the organization's count (if the TC reports a different employee count than originally provided).
    - d. Process the completed forms through the scanner or electronically.
  - 2. Once the data is processed, program software automatically calculates the response rate and determines whether a statistical penalty should be applied (i.e. valid returned questionnaires divided by employee count, originally reported by TC).
- B. Establishing and communicating the Minimum Response Rate
  - 1. The average organization (non-school) participating in the TRP has approximately 500 employees. Using a 5% margin of error and 99% confidence level would require each

organization to return approximately 60% of questionnaires. For consistency, staff will continue to use the 60% return rate to determine if the statistical penalty should be applied to the results.

2. All survey related training and outreach materials provided to an organization will encourage 100% participation in the survey process, as well as, communicate the 60% minimum survey response rate and statistical penalty that will be applied if an organization fails to achieve a 60% response rate.

C. Requests to Conduct a Resurvey

Requests to conduct a resurvey (to avoid the statistical penalty) will be reviewed on a case-by-case basis by the Program Manager. E.g., TC has to go on emergency leave; new TC is assigned in the middle of the survey process; surveys are misplaced or similar circumstance.

**References:**

- A. <http://www.raosoft.com/samplesize.html>  
This web link leads to an online survey sample size calculator provided by Raosoft, Inc. Raosoft, Inc. is a developer of database software with statistical capacities for evaluation and interpretation of survey data.
- B. <http://stattrek.com/>  
This web link leads to the website of Stat Trek. The Stat Trek site offers analytical information and training tools on statistics, probability and survey sampling.